

**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>GB2 2003004 PCT</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/FR2004/000015</b>	International filing date ( <i>day/month/year</i> ) <b>07.01.2004</b>	Priority date ( <i>day/month/year</i> ) <b>15.01.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>G03B21/62</b>		
Applicant <b>SAINT-GOBAIN GLASS FRANCE</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>7</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: a. <input type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of _____ sheets, as follows: <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input checked="" type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input checked="" type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FR2004/000015

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-9 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-17 \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. II

Priority

1. ☐ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☐ copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
  - ☐ translation of the earlier application whose priority has been claimed (Rule 66.7(b)).

2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

The present application specifies

- i. a resolution between  $5 \cdot 10^3$  and  $1 \cdot 10^5$  DPI (see claim 2), and explains that said resolution is obtained by virtue of the particle size, which is between 0.5 and 5 microns (see page 4, lines 30 to 32).

However, the application for which priority is claimed (FRA 03 00 381) merely specifies a resolution of at least  $1 \cdot 10^5$  DPI and provides no explanation with regard to the means by which this result may be achieved.

Consequently, the priority is not valid for the resolution currently claimed.

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Box No. IV

Lack of unity of invention

1. ☒ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
  - ☐ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☒ neither restricted the claims nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
- ☐ complied with.
  - ☒ not complied with for the following reasons:
- See separate sheet.
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☐ all parts.
  - ☒ the parts relating to claims Nos. 1-2, 7-13

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>2, 11-12</u>	YES
	Claims	<u>1, 7-10, 13</u>	NO
Inventive step (IS)	Claims	<u></u>	YES
	Claims	<u>1-2, 7-13</u>	NO
Industrial applicability (IA)	Claims	<u>1-17</u>	YES
	Claims	<u></u>	NO
2. Citations and explanations (Rule 70.7)			
<p>In the present report, reference is made to the following documents:</p> <p>D1: US 3 655 263 A</p> <p>D2: EP 0 561 551 A</p> <p>D3: US 3 609 000 A</p> <p>D4: US 2002/093 607 A</p> <p>D5: EP 0 770 902 A</p> <p>D6: US 6 304 378 B</p> <p>D7: EP 0 414 313 A</p> <p>D8: US 6 327 088 A</p> <p>D9: GB 1 140 416 A</p> <p>D10: US 2002/163 722 A</p> <p>D11: WO 02/41 074 A</p> <p>D12: EP 0 478 187 A</p>			
<p>1. The subject matter of <b>claim 1</b> is already known (PCT Article 33(2)) from each of <b>documents D1 to D3 above</b>, which disclose a screen comprising a substrate with a diffusing surface layer suitable for obtaining an angle of view less than 180° (see for example the abstract and column 2, lines 16 to 37 of <b>D1</b>; or the abstract and figure 1 of <b>D2</b> or <b>D3</b>).</p> <p>With regard to the alternative defining an <b>angle of view of 180°</b>, it should be noted that this alternative is not achievable, since an observer located <b>in the plane of the screen</b> could never look at an image</p>			

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>projected on the screen.</p> <p>2. <b>Claim 2</b> cannot be considered to involve an inventive step (PCT Article 33(3)), since it merely describes a desired result (in particular, a resolution between <math>5 \cdot 10^3</math> and <math>1 \cdot 10^5</math> DPI) without defining any structural element that enables this result to be achieved. It should also be noted that, on the one hand, the desire to obtain a high resolution is well known in the prior art and, on the other hand, it is not clear what technical effect may be obtained by a resolution far higher than can be discerned by the human eye.</p> <p>3. The subject matter of <b>claims 7 to 10 and 13</b> is already known from <b>D1</b>. Said document discloses a diffusing layer, which:</p> <ul style="list-style-type: none"><li>a. includes a binder and particles of metal oxide, particularly alumina, the average size of which is between <math>0.25 \mu\text{m}</math> and <math>40 \mu\text{m}</math>, i.e. overlapping the range from <math>50 \text{ nm}</math> to <math>1 \mu\text{m}</math> of claim 10,</li><li>b. and is between <math>0.25 \mu\text{m}</math> and <math>23 \mu\text{m}</math> thick (from <math>0.0001</math> to <math>0.0009</math> inches), i.e. overlapping the range from <math>0.5 \mu\text{m}</math> to <math>5 \mu\text{m}</math> of claim 13.</li></ul> <p>4. The use of a binder consisting of glass frit or flux according to <b>claims 11 and 12</b> does not appear to be suggested in the available prior art, wherein resin-based binders are always used.</p> <p>Furthermore, since the application discloses no advantage or technical effect resulting from this feature alone, claims 11 and 12 could only be considered to involve an inventive step if they were also to include the features defined in claims 7 to 10 and 13.</p>

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box IV

1. A screen comprising a substrate with a diffusing surface layer capable of achieving an angle of view less than  $180^\circ$  according to claim 1 is already known, for example, from D1 (US 3 655 263 A; see abstract and column 2, lines 16 to 37).  
Consequently, the first claim defining new subject matter is claim 2, which specifies a resolution between 50000 and 100000 DPI. According to the description of the present application (see last paragraph of page 4, particularly lines 31 to 32, and the text on page 5), this resolution is obtained by means of the structure of the diffusing layer defined in claims 7 to 13. Consequently, claims 1 to 2 and 7 to 13 concern the technical problem of obtaining a high-resolution screen.
2. However, claims 3 to 6 and 14 to 16 define a second substrate associated with the substrate of claim 1, and consequently relate to the problem of improving the mechanical strength of the screen (see page 7, lines 19 to 25 of the description).
3. Claim 17 relates to the problem of using the screen of claim 1 as a partition between two areas, so that observers on either side of the screen can benefit from the information displayed by the screen.
4. The resolution of a screen is obviously technically separate from its mechanical strength and the use to which it is put, which leads to the conclusion that the above three groups of claims do not share a special technical feature whereby they are so mutually linked as to form a single general inventive concept (PCT Rule 13.1 and 13.2).